MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

DCS5288 – INTERNET AND WEB PUBLISHING

(All IT Groups)

8 MARCH 2017
9.00 a.m - 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 10 pages with 20 Multiple Choice Questions and 4 structured questions.

2. **SECTION A**: Answer **ALL** questions. Please shade your answers on the OMR sheet provided.

3. **SECTION B**: Answer **ALL** questions. Please write your answers in the answer booklet provided.

SECTION A : MULTIPLE CHOICE QUESTIONS (20 MARKS)

Answer ALL questions in this section. Shade your answers on the OMR sheet provided.

1. The World Wide Web is referred to in short as the _____.
   A. editor
   B. client
   C. web
   D. server

2. By default, the port that is used by the HTTP protocol to establish a TCP connection is _____.
   A. 80
   B. 88
   C. 8080
   D. 21

3. The Intranet is defined as _____.
   A. software that can respond to HTTP requests
   B. a global system of interconnected computer networks that use the protocol suite (TCP/IP) to link devices worldwide
   C. a network security system that monitors and controls the incoming and outgoing network traffic based on predetermined security rules
   D. an internet network that is local to an organization or business

4. _____ is a glass-based wire that transmits light and has significantly greater bandwidth and speed in comparison to metal wires.
   A. Coaxial Cable
   B. Fiber Optic Cable
   C. Twisted Pair Cable
   D. Single Line Cable

5. When a table is created just by using the `<table>` tag, what will be the result?
   A. A table with 100% width will be created.
   B. A table with a caption will be created.
   C. A table with double borders will be created.
   D. A table with no borders will be created.

6. The number of levels of heading tag supported by HTML is _____.
   A. one
   B. four
   C. six
   D. seven

Continued...

7. For the list shown below, which of the following is the most appropriate HTML code for the list.

    1. A
    2. B
    3. C

    A.   A   B   C
    B.   A <li> B <li> C
    C.   A   B   C
    D.   A <li> B <li> C

8. The <a> element allows us:
    A. To insert images in a web page.
    B. To display multimedia element in a web page.
    C. To create forms in a web page.
    D. To link to other URLs on the WWW.

9. Which CSS property configures the font typeface?
    A. font-type
    B. font-family
    C. font-style
    D. font-design

10. Given the following code segment, to change the text colour of "Degree" to green which of the following should be used?

```
<body>
   <div id="mmu">
      <h1>Diploma</h1>
      <h2>Degree</h2>
   </div>
   <h2>Short Courses</h2>
</body>
```

    A. `#mmu h2 {color:green}`
    B. `h2 {color:green}`
    C. `#mmu {color:green}`
    D. `.mmu h2 {color:green}`

11. Which of the following defines a CSS class selector called *product-image*?
    A. product-image {}
    B. #product-image {}
    C. .product-image { }
    D. .product-image [ ]

Continued...

12. CSS style rules can be written as:
    A. inline
    B. internal or embedded
    C. external
    D. All three of the above.

13. Which of the following is true about the *alert()* function in JavaScript?
    A. The message will be displayed on the browser.
    B. The *alert()* function makes the browser show a pop-up to the user.
    C. The user can choose to click on the OK or Cancel button.
    D. The user has to enter some values into the text area to proceed.

14. Given the following statement, what will be the value of *hobby[3]*?

```
var hobby = new Array("Baking","Drawing","Fishing","Reading");
```

    A. Baking
    B. Drawing
    C. Fishing
    D. Reading

15. In JavaScript, the comparison operator used to check both value and data type is:
    A. `===` (3 equal signs)
    B. `==` (2 equal signs)
    C. `=`
    D. `!=`

16. Which is the correct way to get the value from a textbox based on the following code?

```
<input type="text" id="username" />
```

    A. `document.form.username.value;`
    B. `document.getElement("username").value;`
    C. `document.getElementById("username").value;`
    D. `document.getElementByName("username");`

17. Which of the following is false about PHP?
    A. PHP, like JavaScript, is a dynamically typed language.
    B. Usually used as a front end for the client side.
    C. The syntax for loops, conditionals and assignments are identical to JavaScript.
    D. A PHP file will usually have the extension *.php*.

18. Which of the following is false if a variable is created using the *define()* function?
    A. It must be referenced with the $ symbol.
    B. It is defined as a constant.
    C. It can be referenced without using the $ symbol.
    D. The value of the variable will not change.

Continued...

19. How can multiple values be passed to another page through the URL in PHP?
    A. `display.php?$name="Joe",$age="32"`
    B. `display.php?name=Joe&age=32`
    C. `display.php/name=Joe&&age=32`
    D. `display.php?Joe,32`

20. Which of the following best checks to see if the session variable *logged* has been set with a value?
    A. `if(isset('logged')`
    B. `if($_SESSION['logged']!= '')`
    C. `if(isset($_SESSION['logged'])`
    D. `if(isset($_GET['logged'])`

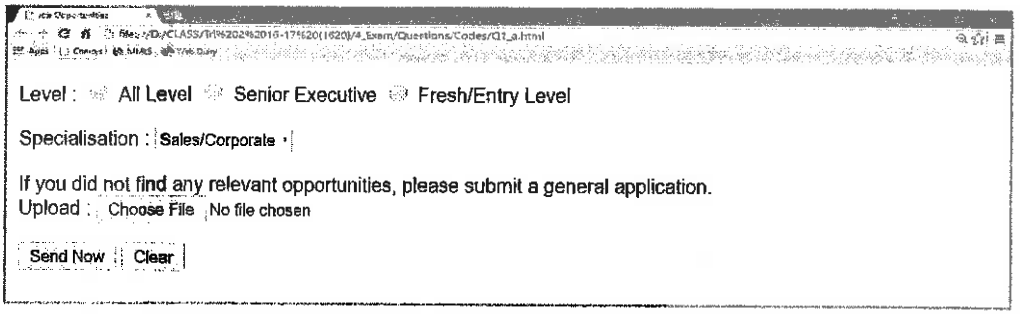
SECTION B : STRUCTURED QUESTIONS (80 MARKS)

Answer ALL questions in this section. Write your answers on the answer booklet provided.

QUESTION 1 (20 MARKS)

a. Write the HTML codes to generate the following webpage.
- The webpage title is *Job Opportunities*.
- The Specialisation are *Sales/Corporate*, *Finance* and *IT – Software*.
- For the file upload, only *.pdf*, *.doc* and *.docx* file extensions are accepted.

[9 marks]


Level : All Level Senior Executive Fresh/Entry Level
Specialisation : Sales/Corporate
If you did not find any relevant opportunities, please submit a general application.
Upload : Choose File No file chosen
Send Now Clear

b. Write the HTML codes to generate the following table. The table width is 700px.

[11 marks]

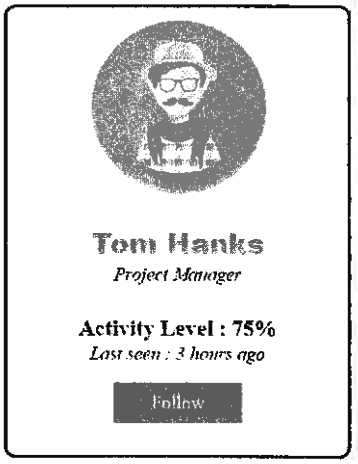
Subscription Pricing

Licence		Monthly		Yearly	
Type	**Employee Number**	**Subscription**	**Maintenance**	**Subscription**	**Maintenance**
Individual	-	RM 45.00	RM 15.00	RM 225.00	RM 70.00
Organisation	10	RM 120.00	RM 60.00	RM 390.00	RM 60.00
	50	RM 350.00		RM 500.00	

Continued...

QUESTION 2 (20 MARKS)

a. Write the External CSS codes based on the following output and HTML codes given. [14 marks]




```
<div id="profile-wrap">
    <div id="profile-image">
        <img src="image/picture.png" />
        <h2>Tom Hanks</h2>
        <span class="small-text">Project Manager</span>
    </div>
    <div class="activity">
        <h4>Activity Level : 75%</h4>
        <span class="small-text">Last seen : 3 hours ago</span>
    </div>
    <div class="follow-btn">
        <a href="#">Follow</a>
    </div>
    <br />
</div>
```

Guides

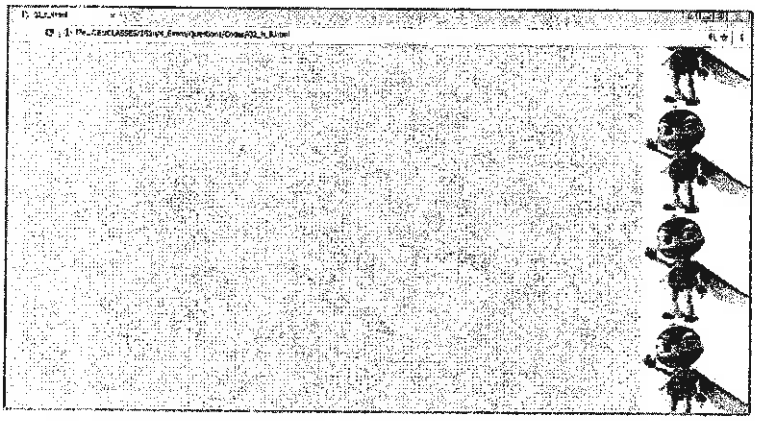
- The profile-wrap box:
  - Located in the middle of the webpage and the width is 250px.
  - The borders are solid, blue and 3px wide and the corners are rounded by 10px.
  - The content are center aligned and the padding for top and bottom sides are 10px while the right and left sides are 20px.
- Image in the profile-image box:
  - The height and width are 150px.
- Heading level 2 in the profile-image box:
  - The font is Arial Black and the colour is #11B771.
- The small-text:
  - The font is italics.
- Heading level 4 in the activity box:
  - The font is bold and the colour is black.
  - The size of the font is 1.2em and between each letter there is a 1.2em spacing.
- The hyperlink in the follow-btn box:
  - There is no underline and the size of the font is 1em.
  - The background colour is #1122BB and the font colour is white.
  - The top and bottom padding is 0.5em whereas the right and left padding is 2em.
  - When the mouse cursor goes over the hyperlink, the text becomes underlined and the background colour changes to #3B3A3A.

Continued...

b. Write only the Internal CSS codes for the following scenarios.

i. The webpage body.

- The background colour is yellow.
- The contents will be bold.
- The image is *ebee.png* which is located in the *image* folder.
- The image is repeated vertically on the right side of the webpage.
- The size of the image is 100px in height and width.



ii. Create a custom font to be loaded on a webpage.

- The font file is *sansation_light.woff*.
- The new font name is *myFirstFont*.
- This new font will be used in all blocks.

[6 marks]

Continued...

QUESTION 3 (20 MARKS)

a. Write only the 2 function codes in JavaScript based on the descriptions and outputs on the next page.

- When the "*Get New Captcha*" button is clicked, it will call function *CaptchaGen()*.
- In function *CaptchaGen()*:
  - The size of each captcha is 6 characters.
  - Set a variable string called *charset* which contains values: "ABCDEFGHIJKLMNOPQRTSUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789"
  - Using a *for loop*:
    - Get a random number between 0 and the length of variable string *charset*.
    - Use this number to identify the selected character from the variable *charset*.
    - Join 6 characters together.
  - Display the 6 character captcha at the right location as stated in the HTML codes given below.

- When the "*Check*" button is clicked, it will call function *check_user()*.
- In function *check_user()*:
  - Get the captcha value.
  - Get the value entered by the user.
  - Compare both values. If they are the same, using an *alert()* function display "*Valid User. Access granted*". Otherwise using an *alert()* function display "*Invalid User. Access denied*".

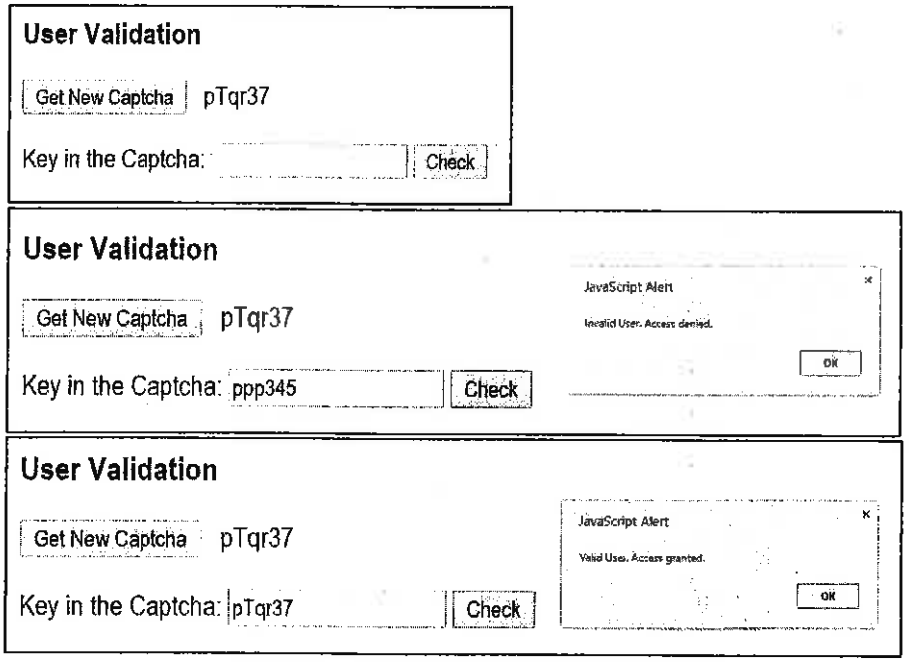
[10 marks]

```
<h3>User Validation</h3>

<input type="button" onclick="CaptchaGen()" value="Get New Captcha" />
<span id="captcha"></span>

<form name ="validate">
      Key in the Captcha: <input type="text" id="user_captcha" />
      <input type="button" value="Check" onclick="check_user();" />
</form>
```

Continued...



b. Write only the JavaScript codes to get the monthly installment amount when purchasing a car.
   - The form *form1* has textboxes named *txtPrice*, *txtDownPayment*, *txtInterest*, *txtDuration* and *txtLoanInstallment*.
   - When the *Calculate* button is clicked, the *calculate()* function will be called.
   - In function *calculate()*:
     - All the information will be retrieved from form *form1*.
     - Calculate the *downpayment* in terms of percentage. Example, if the car price is RM80000.00 and the down payment is RM4500.00, the *downpayment percentage* will be $\frac{4500.00}{80000.00}\ x\ 100$ which is 5.63%.
     - Call function *check_downpayment(...)* and pass the *downpayment percentage*.
     - If the downpayment is valid, calculate the monthly installment based on the following formula.

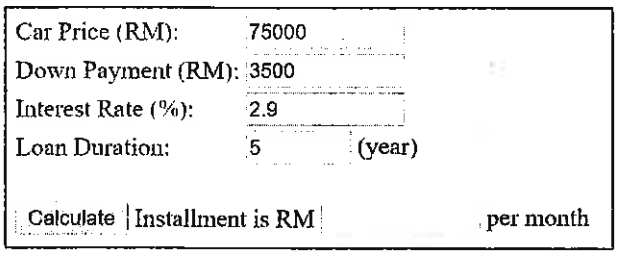
$$\frac{((carPrice - downPayment) + (\left((carPrice - downPayment) x \frac{interest}{100}\right) x\ duration)}{duration\ x\ 12}$$

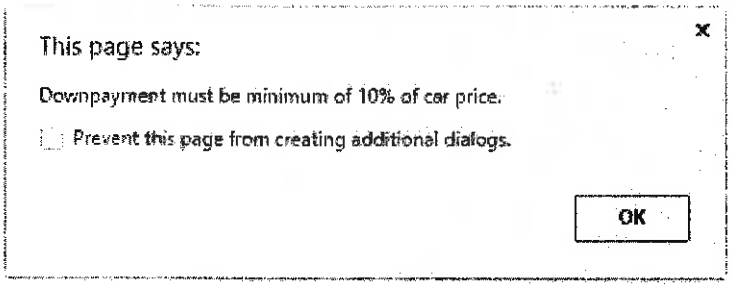
     - Display the installment value in the *txtLoanInstallment* textbox.
     - If the downpayment is invalid, display an alert "*Downpayment must be minimum of 10% of car price.*"

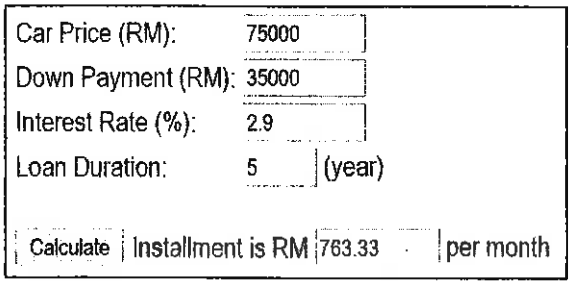
Continued...

- In function *check_downpayment(...)*:
  - Check the status of the down payment.
  - If the *downpayment percentage* is less than 10%, this means that the down payment status is not valid. Otherwise, it will be a valid down payment.
  - Return the status.

[10 marks]







Continued...

QUESTION 4 (20 MARKS)

This PHP and MySQL program lists the messages uploaded by lecturers in a college. Students could view the list and may give feedback if they wish to do so by clicking the *Feedback* hyperlink. The program is based on a *forum* database which has two tables named *message* and *feedback* as shown below.
[For this question, assume that the database connection has already been done.]

Table : **message**

message_id (PK)	message_date	message_author	message_content
1	2016-11-14	Usha	Can we have replacement class next week?
2	2016-11-21	Nurasma	I have uploaded the Online Quiz.
3	2016-11-27	James	Your quiz cover topics 1 to 3.

Table : **feedback**

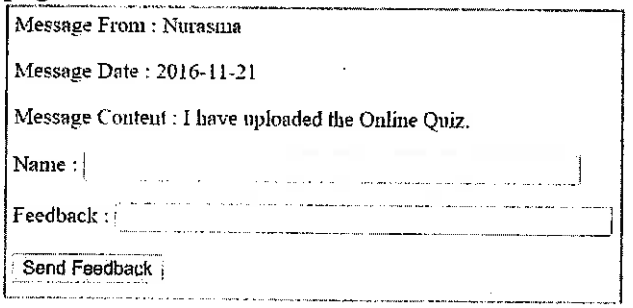
feedback_id (PK)	message_id (FK)	message_author	message_content
1	1	Ali	OK Miss
2	1	Larry	Sure. I will be there.
3	3	Vincent	Sir, got MCQ questions?

a. Based on the details given above, write the PHP and HTML codes to produce the output shown below which is the *view.php* page. The *Feedback* hyperlink will pass the chosen *message_id* through the URL to the *give_feedback.php* page.

Date	Author	Message	Feedbacks	Give Feedback
2016-11-14	Usha	Can we have replacement class next week?	Ali -- OK Miss Larry -- Sure. I will be there.	Feedback
2016-11-21	Nurasma	I have uploaded the Online Quiz.	No feedbacks	Feedback
2016-11-27	James	Your quiz cover topics 1 to 3.	Vincent -- Sir, got MCQ questions?	Feedback

[12 marks]

b. Assume that there is a form that uses the *post* method in the *give_feedback.php* page and there are 2 textboxes named as *feedback_author* and *feedback_content*. Write the necessary PHP and HTML codes so that students could give their feedbacks based on the selected message. Once the process is completed, redirect the user to the *view.php* page.



[8 marks]

End of Page.